INDEX OF AUTHORS

About the M. C. A. and Mondall D. J. M. Ju		Dishari D. D. Danas D. J. F. and Manas D. C.	
Abouelwafa, M. S. A., and Kendall, E. J. M. — In-		Bishnoi, P. R., Donnelly, J. K., and Moore, R. G.,	
situ Volume Fraction Determination in Multi-Com-	649	Rigorous Design of High Pressure Natural Gas Pipeline Using BWR Equation of State	102
ponent Using Pulsed Nuclear Magnetic Resonance Achwal, S. K. and Shenoy, A. V. — Axial Dispersion	643	Bishnoi, P. R., Mehrota, A. K., and Svrcek, W. Y.	103
in an Annulus Under Various Flow Conditions	419	The Effect of Recycling Silicon Chloride on the	
Agrawal, H. L., Ram, P. C. and Singh, S. S	***	Chlorination of Coal Ash	273
Combined Buoyancy Effects of Thermal and		Bokhari, Azhar, and Boulos, Maher — Energy Bal-	2.0
Mass Diffusion on MHD Natural Convection		ance for a D.C. Plasma Torch	171
Flows	131	Boocock, D. G. B., Franco, H., Lee, P., and Mackay.	
Alessi, P., Cividini, A., and Kikic, I Solvent Ex-		D The Production of Synthetic Organic Li-	
traction of Furfural from Aqueous Solutions	119	quids from Wood Using a Modified Nickel Cata-	
Alessi, P., Fredenslund, A. A., Kikic, I., and Ras-		lyst	466
mussen, P On the Combinatorial Part of the		Borodzinski, A., Corma, A., and Wojciechowski,	
UNIFAC and UNIQUAC Models	253	B. W The Nature of the Active Sites in the	
Allen, Stephen J., and McKay, Gordon - Surface		Catalytic Cracking of Gas-Oil	219
Mass Transfer Processes Using Peat as an Ad-		Boulos, Maher I See Barnes, Ramon M	367
sorbent for Dyestuffs	521	Boulos, Maher I. — See Bokhari, Azhar	171
Amundson, Neal R., and Srinivas, B Intra-		Brown, R. A. S., and Ignasiak, B. — Some Aspects	
particle Effects in Char Combustion Steady State		of Research on Coal Liquefaction in Alberta	687
Analysis	476	Brown, Jr., R. D., Emert, G. H., and Pemberton,	
Anderson, Robert B., and Pettit, Paul J Decom-		M. S. — The Role of β -glucosidase in the Biocon-	
position of t-Butyl Acetate on Charcoal and Com-		version of Cellulose to Ethanol	723
parison with Isomers on Charcoal and in the Gas	0440	Brown, R. P., Chornet, E., Fonseca, R., and Grand-	
Phase	390	bois, M. — The Conversion of Peat and Humic	
Andreussi, Paolo — The Onset of Droplet Entrain-	0.00	Materials into Liquid Fuels Using Carbon Mon-	510
ment in Annular Downward Flows	267	oxide	713
Arcelli, Antonio, Castellari, Carlo, Comelli, Fabio,		Cannell, Edward J., Cooper, David G., Wood, Joan	
and Francesconi, Romolo — Water-Liquid Equili-	110	M. and Zajic, J. E. — The Relevance of "HLB" to	
brium in Mixtures of 1,3 Dioxolane-Water	113	de-emulsification of a Mixture of Heavy Oil,	576
Bacon, David W., Downie, John and McLean, David D. — Statistical Identification of a Reaction		Water and Clay	010
Network Using an Integral Plug Flow Reactor	608	The Effect of Mixers on the Formation and Stabi-	
Bailey, J. E., Lee, C. K. and Yeung, S. Y. S. — Ex-	000	lity of Aerated Ammonium Nitrate Gels	549
perimental Studies of a Consecutive-Competitive		Carson, Thomas C., Caspers, John, Hastings, Ken-	17.20
Reaction in Steady State and Forced Periodic		neth E., and Potts, John D. — Two-Step Coal	
CSTRs	212	Liquefaction is a Hydrogen Efficient Route to	
Bakhshi, Narendra, N., Mathews, Joseph F., and		Distillate Fuels	703
Mathur, Indresh — Study of Chromia Alumina		Casper, John - See Carson, Thomas C	703
Catalysts	601	Castellari, Carlo - Arcelli, Antonio	113
Barnes, Ramon M., Boulos, Maher I., and Gagne,		Cavendish, James C., and Shadman, Farhang -	
Ronald - Effect of Swirl and Confinement on the		An Analytical Model for the Combustion of Coal	
Flow and Temperature Fields in an Inductively		Particles	470
Coupled r.f. Plasma	367	Chand, Prem, Mirajgaokar, A. G. and Prasad,	
Barone, J. P., Furth, W., and Loynaz, S Sim-		Nawal K An Experimental Study on Solid-	
plified Derivation of the General Population Bal-		Liquid Flow Through Rectangular Ducts	295
ance Equation for a Seeded, Continuous Flow		Chaudhari, R. V., and Ramachandran, P. A.	
Crystallizer	137	Overall Effectiveness Factor of a Slurry Reactor	110
Basmadjian, D., and Hsieh, S. T Isothermal		for Non-Linear Kinetics	412
Column Sorption of Ethylene-Carbon Dioxide	105	Chen, B. H. and Jain, S. C. — Gas Absorption in a	991
Mixtures with Azeotropic Behaviour	185	Screened-Packed Column	281
Beizaie, Masoud, and Tien, Chi — Particle Deposi-		Chenier, C. L., Esmail, M. N., Hill, G. A., and Shook,	
tion on a Single Spherical Collector, A Three- Dimensional Trajectory Calculation	12	C. A. — Numerical and Experimental Study of a Falling Liquid Column	3
Bela, A., Jentz, N. E. and O'Hara, J. B. — Coal	14	Chevalier, Jean-Louis, Desplances, Hervé, et Llinas,	
Liquefaction: The Impact of Product Composition		J. Richard — Transferts thermiques entre un	
on Relative Economics	682	serpentin et des fluides newtoniens ou non newto-	
Bennion, D. W., Donnelly, J. K., Moore, R. G., Serres,	002	niens agité par une turbine à pales inclinées dans	
A. J., and Vorndran, L. D. L Bitumen Separa-		une cuve	160
tion for Experimental Use	580	Chhabra, R. P., Uhlherr, P. H. T Sphere Motion	
Bernstein, G. J., Leonard, R. A., Pelto, R. H., and		Through Non-Newtonian Fluids at High Reynolds	
Ziegler, A. A Flow Over Circular Weirs in a		Number	124
Centrifugal Field	531	Chhun, T., et Couderc, J. P Dissolution à Faible	
Bicerolu, O., and Gauvin, W. H The Chlorination		Flux de Systèmes Fortement Solubles en Fluidi-	
Kinetics of Zirconium Dioxide in the Presence		sation Liquide	134
of Carbon	357	Chiou, J. P. and Na, T. Y Laminar Natural Con-	
Bishnoi, P. R., Cronje, J. S., and Svrcek, W. Y.		vection over a Slender Vertical Frustum of a	100
The Application of the Characteristics Method to		Cone with Variable Surface Temperature	438
Shock Tube Data that Simulate a Gas Pipeline	205	Chornet, E. — See Brown, R. P.	713
Rupture	289	Chornet, E., Fonseca, R., Grandbois, M., Kelly,	

James F., and Roy, C Statistical Study on the		Fonseca, R. — See Brown, R. P.	77
Batch Conversion of Estevan Lignite Into Oils Using Carbon Monoxide and Hydrogen Mixtures	458	Fonseca, R. — See Chornet, E	458
Christoffel, G. Erhard, Robschlager, Karl H., and	300	Coal Gasification in a Spouted Bed	84
Surjo, Indarto, T Kinetic Investigation of		Foulkes, F. R., Kalia, R. K., and Kirk, D. W	
Complex Pseudo Mass Action Systems by Use		A Preliminary Study of the Corrosiveness of	
of the Pulse Method	513	Methyl Fuel Gasoline Blends on Materials Used	es a
Christoffel, G. Erhard and Robschlager, Karl H. —		in Automotive Fuel Systems	654 113
Kinetic Investigation of the Isomerization of C _x -Aromatics	517	Francesconi, Romolo — See Arcelli, Antonio Franco, H. — See Boocock, D. G. B	466
Cividini, A. — See Alessi, P.	119	Fredenslund, A. A. — See Alessi, P.	253
Cloutier, Léonce, Methot, Claude J. and Rémillard,		Furth, W See Barone, J. P	137
Michel — Cristallisation du Trihydrate D'Alu-		Gaggioli, Richard A., Rodriguez, Luis - Second-	
mine: Effet des Conditions d'Agitation	348	Law Efficiency Analysis of a Coal Gasification	976
Cohen, Yoram, MacKay, Donald, and Shiu, Wang		Process Gagne, Roland — See Barnes, Ramon M	376 367
Ying — Mass Transfer Rates Between Oil Slicks and Water	569	Ganguly, U. P. — Direct Method for the Prediction	001
Comelli, Fabio — See Arcelli, Antonio	113	of Expanded Bed Height in Liquid-Solid Fluidi-	
Cooper, David G., - See Cannell, Edward J	576	zation	559
Corma, A. — See Borodzinski, A.	219	Gangwal, S. K., Hudgins, R. R. and Silveston, P. L.	
Corma, A. and Wojciechowski, B. W. — The Nature		- Reliability and Limitations of Pulse Chroma-	
of the Active Sites in the Reactions of Cumene	620	tography in Evaluating Properties of Flow Sys-	33
on Hy and LaY Catalysts	620	tems. II — End Effects	357
Concentrations of Hydrogen Sulfide over Acti-		Gebert, W., Karr, A. E., and Wang, M. — Extraction	
vated Carbon	72	of Whole Fermentation Broth with Karr Reci-	
Couderc, J. P See Chhun, T	134	procating Plate Extraction Column	249
Cronje, J. S. — See Bishnoi, P. R	289	Goldman, J. M. — See Filby, J. E.	77
Dang, Vi-Duong — Heat Transfer of Low Peclet		Gopal, J. S. and Sharma, M. M. — Mass Transfer	538
Number Power-Law Fluid Between Parallel Plates with Heat Generation	401	Characteristics of a 'CYCLO-REACTOR'	990
Deckwer, W. D., Hallensleben, J., and Popovic, M. —	101	Point Heat Transfer in Non-Newtonian Fluids	431
Exclusion of Gas Sparger Influence on Mass		Grandbois, M See Brown, R. P	713
Transfer in Bubble Columns	190	Grandbois, M See Chornet, E	458
Degaleesan, T. E., Laddha, G. S., and Venkatrama,		Gransden, J. F., Leeder, W. R., and Price, J. T	
J. — Continuous Phase Axial Mixing in Rotary	000	Pitch and Petroleum Coke Additions to Coke Oven	990
Disk Contactors	206	Charges	339
Dekkee, D. — See Carreau, P. J Desplanches, Hervé — See Chevalier, Jean-Louis	549 160	Gravelle. Denis W., et Landreville, Alain — Carac- térisation de la Tourbe par le Traitement des	
DeVaux, George R., Dutkiewicz, Bronek, and Eccles,	200	Eaux Usées d'Abattoirs	235
Richard M. — Current Status of H-Coal® Commer-		Gupta, Rahul and Mujumdar, A. S Aerodynamics	
cialization	699	of a Vibrated Fluid Bed	332
Doan, Thi Hoa, Nowlan, Marie-France and Sangster,		Hallensleben, J. — See Deckwer, W. D	190
James — Prediction of the Viscosity of Mixed	097	Hamielec, A. E., Kiparissides, C., and MacGregor,	
Electrolyte Solutions from Single-Salt Data Donnelly, J. K. — See Bennion, D. W	637 580	J. F. — Continuous Emulsion Polymerization of Vinyl Acetate. Part I. Experimental Studies	48
Donnelly, J. K. — See Bishnoi, P. R	103	Hamielec, A. E., Kiparissides, C., and MacGregor,	40
Douglas, W. J. M., Li, Y-K, and Mujumdar, A. S.		J. F Continuous Emulsion Polymerization of	
- Evaporation Under an Impinging Jet: A Nu-		Vinyl Acetate. Part II. Parameter Estimation and	
merical Model	448	Simulation Studies	56
Downie, John — See Bacon, David W	608	Hamielec, A. E., Kiparissides, C., MacGregor, J. F.,	
Dutkiewicz, Bronek — See DeVaux, George R Eccles, Richard M. — See DeVaux, George R	699 699	and Singh, S. — Continuous Emulsion Polymerization of Vinyl Acetate. Part III. Detection of	
Elliott, C. D., and Malcolm, J. D. — Interfacial	000	Reactor Performances by Turbidity-Spectra and	
Tension from Height and Diameter of a Single		Liquid Exclusion Chromatography	65
Sessile Drop on Captive Bubble	151	Hanna, O. T., Mazet, P. R. and Sandall, O. C	
Elliott, Douglas C. — Bench Scale Research in	500	A New Theoretical Formula for Turbulent Heat	
Biomass Liquefaction by the CO-Steam Process	730	and Mass Transfer with Gases or Liquids in Tube	1.10
Emert, G. H. — See Brown, Jr., R. D Escher, Gerd, Hosang, Hans, Langhoff, Josef and	723	Hartland. S., Kumar, A., and Vohra, D. K. — Sedi-	443
Wolowski, Eckard — Status of German Technol-		mentation of Droplet Dispersions in Counter-	
ogy on Coal Hydrogenation Development by Ruhr-		Current Spray Columns	154
kohle AG and Veba Oel AG	693	Hassan, Ibrahim T. M., and Robinson, Campbell W.	- 5-01
Esmail, M. N. — Wave Profiles on Inclined Falling		Mass Transfer Coefficients in Mechanically Agi-	
Film	145	tated Gas-Aqueous Electrolyte Dispersions	198
Esmail, M. N. — See Chenier, C. L Esmail, M. N., and Nigam, K. D. P. — Liquid Flow	3	Hastings, John — See Carson, Thomas C	703
Over A Rotating Dip Coater	564	 Hayduk, Walter, Ma, Dennis and Neale, Graham Vortex Formation in Stirred Draining Vessels. 	
Fahidy, T. Z., and Ismail, M. I Electrolysis in a		II. Gravity Drainage	396
Pilot-Plant Size Cell Using Inclined Electrodes		Hayduk, W., and Neale, G Improved Correlations	2.00
and Non-Uniform Magnetic Fields	505	for Prediction of Vortex in Stirred Draining	
Fikis, David V., and Ross, Robert A. — Gasification		Vessels	129
Reactions of Chars and Modified Chars Produced from Jack Pine Bark	230	Hernandez, O., and Montfort, J. P. — Calculation of Critical Constant of Solutions with the NRTL	
Filby, J. E., Flynn, P. C., and Goldman, J. M	200	Solutions	271
Direct Coking of Athabasca Tar Sand	77	Hikita, H., Ishikawa. H., and Matsuda. M Kine-	
Fling, Jr., Wayne A. and Oko, Uriel M Short		tics of Oxidation of Cuprous Chloride by Oxygen	
Residence Hydropvrolysis for Coals	708	in Aqueous Hydrochloric Acid Solutions	594
Flynn, P. C See Filby, J. E	77	Hill, G. A. — See Chenier, C. L.	3

Horlings, H., Scott, D. S., and Soupilas, A		Luong, J. H. T., and Volesky, B. — Determination	
Extraction of Metals from Sewage Sludge	673	of the Heat of Some Aerobic Fermentations	497
Hosang, Hans - See Escher, Gerd	693	Luus, Rein and Wong, Kin Tuck — Model Reduction	
Hsieh, S. T See Basmadjian, D	185	of High-Order Multistage Systems by the Method	
Hudgins, R. R See Gangwal, S. K	33	of Orthogonal Collocation	382
Huibers, Derk, T. A Fuels and Chemical Feed-		Ma, Dennis - See Hayduk, Walter	396
Stocks from Lignocellulosic Biomass	718	MacGregor, J. F See Hamielec, A. E	48
Hutin, D., and Storck, A Energetic Aspects of		MacGregor, J. F See Hamielec, A. E	56
Turbulence Promotion Applied to Electrolysis		MacGregor, J. F See Hamielec, A. E	65
Processes	92	MacKay, D See Boocock, D. G. B	466
Hwang, G. J., and Lee, S. L Solidification of a		MacKay, Donald - See Cohen, Yoram	569
Low Peclet Number Fluid Flow in a Round		Maejima, H., Suzuki, T., and Uchida, S The	
Pipe with the Boundary Conditions of the Third		Flooding Condition of a Turbulent Contact Ab-	
Kind	177	sorber	406
Ignasiak, B See Brown, R. A. S	687	Malcolm, J. D See Elliott, C. D	151
Ishii, Tsutomu, and Pei, David C. T Drag Coeffi-		Mann, R. F., and Tycholiz, D Correlation and	
cient of Relatively Contaminated Gas Bubbles	25	Prediction of Oxidation Rates Over a Vanadium	
Ishikawa, H. — See Hikita, H	594	Oxide Catalyst	545
Ismail, M. I See Fahidy, T. Z	505	Marchildon, L See Lo, S. N	41
Jentz, N. E. — See Bela, A	682	Masliyah, Jacob H., and Polikar, Marcel — Terminal	
Jones, M. W See Huibers, D. T. A	.718	Velocity of Porous Spheres	299
Kahrim, A. and Mather, A. E Enthalpy of Solu-		Mather, A. E. — See Kahrim, A	660
tion of Carbon Dioxide in Diethanolamine Solu-		Mathews, Joseph F See Bakhshi, Narendra N	601
tions	660	Mathur, Indresh - See Bakhshi, Narendra N	601
Kalia, R. K. — See Foulkes, F. R	654	Matsuda, M See Hikita, H	594
Karr, A. E. — See Gebert, W.	249	Mazet, P. R See Hanna, O. T	443
Keirstead, K. R See Carreau, P. J	549	McKay, Gordon - See Allen, Stephen J	521
Kelly, James F See Chornet, E	458	McLean, David D See Bacon, David W	608
Kendall, E. J. M See Abouelwafa, A	653	Mehrota, A. K See Bishnoi, P. R	273
Kikic, I See Alessi, P	119	Methot, Claude J See Cloutier, Léonce	348
Kikic, I. — See Alessi, P.	253	Mirajgaokar, A. G See Chand, Prem	295
Kiparissides, C See Hamielec, A. E	48	Montfort, J. P See Hernandez, O	271
Kiparissides, C. — See Hamielec, A. E	56	Moore, R. G See Bennion, D. W	580
Kiparissides, C. — See Hamielec, A. E	65	Moore, R. G See Bishnoi, P. R	103
Kirk, D. W. — See Foulkes, F. R.	654	Mori, Shigeru and Tanimoto, Akira - Heat Trans-	
Klinzing, George E A Comparison of Pressure		fer from a Packed Bed to Outside Turbulent Flow	279
Losses in Bends Between Recent Data and Models		Mori, Shigeru and Tanimoto, Akira - Application	
for Gas-Solid Flow	670	of the Traditional Concept of Over-All Resistance	
Kobayashi, Masayoshi — Transient Behavior of the		to Conjugated Heat Transfer Problems with a	
Oxidation of Propylene Over a Modified Silver		Laminar Flow	535
Oxide	588	Mujumdar, A. S See Douglas, W. J. M	448
Kranich, Wilmer L., and Weiss, Alvin H Oil and		Mujumdar, A. S. — See Gupta, Rahul	332
Gas from Cellulose by Catalytic Hydrogenation	735	Na, T. Y. — See Chiou, J. P.	438
Kristmanson, D. D., Picot, J. J. C., Smedley, J. B.,		Neale, G. — See Hayduk, W.	129
and Tomey, T. D Spray Atomizer Droplet		Neale, G See Hayduk, W	396
Spectrum Measurement	314	Newell, R. B A Comparative Study of Model and	
Krumins, Aivars E., Rastogi, Anil K., Rusak, Mi-		Goal Coordination in the Multilevel Optimization	
chael E., and Tassios. Dimitrios - Prediction		of a Double-Effect Evaporator	275
of Binary Vapor-Liquid Equilibrium from One-		Newell, R. B. — See Lee, P. L	389
Parameter Equations	663	Nigam, K. D. P. and Vasudeva, K Residence	
Kuhne, J., and Wippern, D Application of a		Time Distribution in Static Mixer	543
Linear-Three-Phase Model to a Fluidized-Bed		Nigam, K. D. P See Esmail, M. N	564
Reactor	527	Nowlan, Marie-France - See Doan, Thi Hoa	637
Kumar, A See Hartland, S	154	O'Hara, J. B. — See Bela, A	682
Laddha, G. S See Degaleesan, T. E	206	Oko, Uriel M See Fling, Jr., Wayne A	708
Landreville, Alain - See Gravelle, Denis W	235	Otto, F. D., and Rowley, W. J Ozonation of	
Langhoff, Josef - See Escher, Gerd	693	Cyanide with Emphasis on Gold Mill Wastewaters	646
Leduy, Anh. Ramalho. Rubens S., and Ratnani, Ke-		Pathak, Brajendra K., Singh, Prem C., and Singh,	
bir - Activated Carbon Absorption Treatment		Vishwa, N Gas Chromatographic Study of	
of Spent Pickle Brine	325	Binary Diffusion of Gases	38
Lee, C. K. — See Bailey, J. E	212	Patwardhan, V. S Gas-Liquid Reactions in	
Lee, P See Boocock, D. G. B.	466	Packed Beds: Regimes of Reaction in the Static	
Lee, P. L. and Newell, R. B The Use of Krasov-		Hold-up	454
skii's Stability Technique for Control Strategy		Pei, David C. T See Ishii, Tsutomu	25
Evaluation and System Design	389	Pelto, R. H. — See Bernstein, G. J	531
Lee, S. L See Hwang, G. J.	177	Pemberton, M. S See Brown, Jr., R. D	
Leeder, W. R See Gransden, J. F.	339	Perona, J. J. and Vavruska, J. S Measurements	
Leonard, R. A See Bernstein, G. J.	531	of Interfacial Areas in Cocurrent Gas-Liquid	
Li, Y-K — See Douglas, W. J. M	448	Downward Flow	141
Lim, C. J See Foong, S. K.	84	Pettit, Paul J. — See Anderson, Robert B	390
Llinas, J. Richard - See Chevalier, Jean-Louis	160	Picot, J. J. C. — See Kristmanson, D. D	314
Lo. S. N., Marchildon, L., and Valade, J. L Le		Pinder, K. L Surface Area Prediction for Two	
Rendement de deux Réservoirs Agités en Série		Phase Drops in an Immiscible Liquid	318
avec Alimentation Séparée Basé sur la Cinétique		Platford, R. F Self-Herding of Octanol-Hexade-	
de Monod	41	canol Mixtures on Water	393
Lo, S. N., and Valade, J. L Biodegradation of		Polikar, Marcel — See Masliyah, Jacob H	299
High-Yield Spent Bisulfite Pulping Liquor in Two		Popovic. M See Deckwer, W. D	190
Volume-Varied Chemostats in Series	241	Potts, John D. — See Carson, Thomas C	703
Loynaz, S. — See Barone, J. P.	137	Prasad, Nawal K. See Chand, Prem	295

Price, J. T. — See Gransden, J. F	339 131	Singh, S. S. — See Agrawal, H. L	131 38 314
Ramachandran, C., Vijayan, S., and Woods, D. R. —		Smedley, J. B. — See Kristmanson, D. D	673
Bulk and Interfacial Physical Properties of Aqueous Solutions of Sodium Lauryl Sulphate:		Soupilas, A. — See Horlings, H Srinivas, B. — See Amundson, Neal R	476
		Storck, A. — See Hutin, D.	92
Part IV: Dilute Aqueous Solution Behavior by		Surjo, Indarto T. — See Christoffel, Erhard G	513
Electron Spin Resonance Studies and by pH and	405		406
Surface Tension Measurements	485	Suzuki, T. — See Maejima, H Svrcek, W. Y. — See Bishmoi, P. R	289
Ramachandran, P. A. — See Chaudhari, R. V	412		
Ramalho, Rubens S. — See Leduy, Anh	325	Svrcek, W. Y See Bishnoi, P. R	273
Rane, Anil and Yao, Shi-Chune — Heat Transfer of Evaporating Droplet Flow in Low Pressure		Tang, C. L. — Two Phase Flow in a Climbing-Film Evaporator	425
Systems	303	Tanimoto, Akira — See Mori, Shigeru	279
Rasmussen, P. — See Alessi, P.	253	Tanimoto, Akira — See Mori, Shigeru	535
Rastogi, Anil K. — See Krumins, Aivars E	663	Tassios, Dimitrios — See Krumins, Aivars E	663
Ratnani, Kebir, See Leduy, Anh	325	Tien, Chi — See Beizaie, Masoud	12
Reiff, Edward K. Jr., Use of the Quasi Steady State	020	Tollefson, E. L. — See Coskun, I.	72
Assumption for a Stirred Tank Reactor with De-		Tomey, T. D. — See Kristmanson, D. D.	314
caying Catalyst	409	Tycholiz, D. — See Mann, R. F.	545
Rémillard, Michel — See Cloutier, Léonce	348	Uchida, S. — See Maejima, H.	406
Ritchie, Ben W. — Simulating the Effects of Mix-	040	Uhlherr, P. H. T. — See Chhabra, R. P.	124
ing on the Performance of Unpremixed Flow		Valade, J. L. — See Lo, S. N.	41
Chemical Reactors	626	Valade, J. L. — See Lo, S. N.	241
Robinson, Campbell W. — See Hassan, Ibrahim	020	Vasudeva, K. — See Nigam, K. D. P.	543
T. M.	198	Vavruska, J. S. — See Perona, J. J.	141
Robschlager, Karl H See Christoffel, Erhard G.	513	Venkatamara, J. — See Degaleesan, T. E.	206
Robschlager, Karl H. — See Christoffel, Erhard G.	517	Vijayan, S. — See Ramachandran, C.	485
Rodriguez, Luis, — See Gaggioli, Richard A	376	Vohra, D. K. — See Kumar, A.	154
Ross, Robert A. — See Fikis, David V.	230	Volesky, B. — See Luong, J. H. T.	497
Round, G. F. — An Explicit Approximation for the	200	Vorndran, L. D. L. — See Bennion, D. W	580
Friction Factor-Reynolds Number Relation for		Wang, M. — See Gebert, W.	249
	122	Watkinson, A. P. — See Foong, S.	77
Rowley, W. J. — See Otto, F. D.	646	Watkinson, A. P. — Process Heat Transfer: Some	1.1
Roy, C. — See Chornet, E.	458	Practical Problems	553
Rusak, Michael E. — See Krumins, Aivars E	663	Weiss, Alvin H. — See Kranich, Wilmer L.	73.
Sandall, O. C. — See Hanna, O. T	443		527
Sandall, U. C. — See Hanna, U. I	637	Wippern, D. — See Kuhne, J	219
Sangster, James — See Doan, Thi Hoa	673	Wojciechowski, B. W. — See Borodzinski, A Wojciechowski, B. W. — See Corma, A	620
Scott, D. S. — See Horlings, H	019		120
	410	Wolff, Claude — On the Real Molecular Weight of	
Acetic Acide in the Gas State	416	Polyethylene Oxide of High Molecular Weight in	001
Sen Gupta, P., and Singh, A. N. — Expansion Be-	110	Water	634
haviour of Liquid-Solid Fluidized Bed Systems	116	Wolowski, Eckard — See Escher, Gerd	693
Serres, A. J. — See Bennion, D. W.	580	Wong, Kin Tuck — See Luus, Rein	382
Shadman, Farhang — See Cavendish, Jaces C	470	Wood, Joan M. — See Cannell, Edward J	576
Sharma, M. M. — See Gopal, J. S	538	Woods, D. R. — See Ramachandran, C	485
Shenoy, A. V. — See Achwal, S. K.	419	Yan, T. Y Dynamics of a Trickle-Bed Hydro-	
Shiu, Wan Ying — See Cohen, Yoram	569	cracker with a Quenching System	259
Shook, C. A. — See Chenier, C. L.	3	Yao, Shi-Chune - See Rane, Anil	303
Silveston, P. L. — See Gangwal, S. K	33	Yeung, S. Y. S. — See Bailey, J. E.	212
Singh, A. N. — See Sen Gupta, P.	116	Zajic, J. E. — See Cannell, Edward J.	576
Singh, Prem C. — See Pathak, Brajendra K	38		
Singh, S. — See Hamielec, A. E	65	Ziegler, A. A. — See Bernstein, G. J	531

INDEX OF PAPERS

Activated Carbon Absorption Treatment of Spent		and G. S. Laddha	206
Pickle Brine - Kebir Ratnani, Anh Leduy and		Conversion of Peat and Humic Materials into Liquid	
Rubens S. Ramalno	325	Fuels Using Carbon Monoxide, The - E. Chornet,	
Aerodynamics of a Vibrated Fluid Bed - Rahul		R. Fonseca, M. Grandbois anl R. P. Brown	713
Gupta and A. S. Mujumdar	332	Correlation and Prediction of Oxidation Rates Over	
Analytical Model for the Combustion of Coal Par-	002	a Vanadium Oxide Catalyst — R. F. Mann and	
			5.45
ticles, An — Farhang Shadman and James C.	450	D. Tycholiz	545
Cavendish	470	Cristallisation du Trihydrate D'Alumine: Effet des	
Application of a Linear-Three-Phase Model to a		Conditions d'Agitation — Michel Rémillard,	
Fluidized-Bed Reactor — J. Kuhne and D. Wip-		Léonce Cloutier and J. Claude Méthot	348
pern	527	Current Status of H-Coal® Commercialization —	
Application of the Characteristic Method to Shock		Richard M. Eccles, George R. DeVaux and Bronek	
Tube Data that Simulate a Gas Pipeline Rupture,		Dutkiewicz	699
		Decomposition of t-Butyl Acetate on Charcoal and	000
The - J. S. Cronje, P. R. Bishnoi and W. Y.	000		
Svrcek	289	Comparison with Isomers on Charcoal and in the	
Application of the Traditional Concept of Over-All		Gas Phase — Paul J. Pettit and Robert B. Ander-	
Resistance to Conjugated Heat Transfer Problems		son	390
with a Laminar Flow - Shigeru Mori and Akira		Determination of the Heat of Some Aerobic Fermen-	
Tanimoto	535	tations - J. H. T. Luong and B. Volesky	497
Axial Dispersion in an Annulus Under Various Flow		Direct Coking of Athabasca Tar Sand - J. E. Filby,	-
Conditions — S. K. Achwal and A. V. Shenoy	419	P. C. Flynn and J. M. Goldman	77
	410		0.0
Bench Scale Research in Biomas Liquefaction by the		Direct Method for the Prediction of Expanded Bed	
CO-Steam Process — Douglas C. Ell'ott	730	Height in Liquid-Solid Fluidization — U. P. Gan-	
Biodegradation of High-Yield Spent Bisulfite Pulp-		guly	559
ing Liquor in Two Volume-Varied Chemostats in		Dissolution à Faible Flux de Systèmes Fortement	
Series - S. N. Lo and J. L. Valade	241	Solubles en Fluidisation Liquide - T. Chhun et	
Bitumen Separation for Experimental Use — L.D.L.		J. P. Coudere	134
			107
Vorndran, A. J. Serres, J. K. Donnelly, R. G.	F00	Drag Coefficient of Relatively Contaminated Gas	0.0
Moore and D. W. Bennion	580	Bubbles — Tsutomu Ishii and David C. T. Pei	25
Bulk and Interfacial Physical Properties of Aqueous		Dynamics of a Trickle-Bed Hydrocracker with a	
Solutions of Sodium Lauryl Sulphate: Part IV:		Quenching System — T. Y. Yan	259
Dilute Aqueous Solution Behavior by Electron		Effect of Mixers on the Formation and Stability	
Spin Resonance Studies and by pH and Surface		of Aerated Ammonium Nitrate Gels, The - K. R.	
Tension Measurements — S. Vijayan, C. Rama-		Keirstead, D. DeKee and P. J. Carreau	549
	405	Effect of Recycling Silicon Chloride on the Chlori-	0.46
chandran and D R. Woods	485		
Calculation of Critical Constants of Solutions with		nation of Coal Ash, The - P. R. Bishnoi, W. Y.	
the NRTL Solutions — J. P. Montfort and O.		Svrcek and A. K. Mehrotra	273
Hernande 4	271	Effect of Swirl and Confinement on the Flow and	
Caractérisation de la Tourbe par le Traitement des		Temperature Fields in an Inductively Coupled r.f.	
Eaux Usées d'Abattoirs - Denis W. Gravelle et		Plasma - Maher I. Boulos, Ronald Gagne and	
Alain Landreville	235	Ramon M. Barnes	367
Chlorination Kinetics of Zirconium Dioxide in the	200	Electrolysis in a Pilot-Plant Size Cell Using Inclined	001
Presence of Carbon, The — O. Bicerolu and W. H.		Electrodes and Non-Uniform Magnetic Fields -	ma.
Gauvin	357	M. I. Ismail and T. Z. Fahidy	505
Coal Gasification in a Spouted Bed — S. K. Foong,		Energetic Aspects of Turbulence Promotion Applied	
C. J. Lim and A. P. Watkinson	84	to Electrolysis Processes — A. Storck and D.	
Coal Liquefaction: The Impact of Product Compo-		Hutin	92
sition on Relative Economics - J. B. O'Hara,		Energy Balance for a D.C. Plasma Torch - Azhar	
N. E. Jentz and A. Bela	682	Bokhari and Maher Boulos	171
Combinatorial Part of the UN'FAC and UN'QUAC	002	Enthalpy of Solution of Carbon Dioxide in Dietha-	2.03
Models, On the — I. Kikic, P. Alessi, P. Rasmus-	250	nolamine Solutions — A. Kahrim and A. E.	000
sen and A. A. Fredenslund	253	Mather	660
Combined Buoyancy Effects of Thermal and Mass		Evaporation Under an Impinging Jet: A Numerical	
Diffusion on MHD Natural Convection Flows -		Model — A.S. Mujumdar, Y-K Li and W. J. M.	
H. L. Agrawal, P. C. Ram and S. S. Singh	131	Douglas	448
Comparative Study of Model Goal Coordination in		Exclusion of Gas Sparger Influence on Mass Trans-	
the Multilevel Optimization of a Double Effect		for in Bubble Columns — W. D. Deckwer, J.	
Evaporator, A — R. B. Newell	275	Hallensleben and M. Popovic	190
	2(1)	Expansion Behaviour of Liquid-Solid Fluidized Bed	100
Comparison of Pressure Losses in Bends Between			110
Recent Data and Models for Gas-Solid Flow, A -		Systems — A. N. Singh and P. Sen Gupta	116
George E. Klinzing	670	Experimental Studies of a Consecutive-Competitive	
Continuous Emulsion Polymerization of Vinyl Ace-		Reaction in Steady State and Forced Periodic	
tate. Part I. Experimental Studies - C. Kiparis-		CSTRs - C. K. Lee, S. Y. S. Yeung and J. E.	
sides, J. F. MacGregor and A. E. Hamielec	48	Bailey	212
Continuous Emulsion Polymerization of Vinyl Ace-		Experimental Study on Solid-Liquid Flow Through	
		Rectangular Ducts, An — Nawal K. Prasad, Prem	
tate — Part II. Parameter Estimation and Simulation Studies — C. Kiparissides I. F. MacCreson			205
lation Studies — C. Kiparissides, J. F. MacGregor	FO	Chand and A. G. Mirajgaokar	295
and A. E. Hamielec	56	Explicit Approximation for the Friction Factor-	
Continuous Emulsion Polymerization of Vinyl Ace-		Reynolds Number Relation for Rough and Smooth	
tate. Part III. Detection of Reactor Performance		Pipes, An — G. F. Round	122
by Turbidity-Spectra and Liquid Exclusion Chro-		Extraction of Metals from Sewage Sludge - D. S.	
matography — C. Kiparissides, J. F. MacGregor,		Scott, H. Horlings and A. Soupilas	673
S. Singh and A. E. Hamielec	65	Extraction of Whole Fermentation Broth with Karr	
	00		
Continuous Phase Axial Mixing in Rotary Disk		Reciprocating Plate Extraction Column — A. E.	0.40
Contactors — J. Venkatarama, T. E. Degaleesan		Karr, W. Gebert and M. Wang	249

Flooding Condition of a Turbulent Contact Ab-		Mazet	443
sorber, The — S. Uchida, T. Suzuki and H. Mae-	400	Numerical and Experimental Study of a Falling	
jima Flow Over Circular Weirs in a Centrifugal Field —	406	Liquid Column — G. A. Hill, C. L. Chenier, C. A. Shook and M. N. Esmail	3
R. A. Leonard, R. H. Pelto, A. A. Ziegler and		Oil and Gas from Cellulose by Catalytic Hydrogena-	
G. J. Bernstein	531	tion - Wilmer L. Kranich and Alvin H. Weiss	735
Fuels and Chemical Feedstocks from Lignocellulosic		Onset of Droplet Entrainment in Annular Down-	
Biomass — Derk T. A. Huibers and M. W. Jones	718	ward Flows, The — Paolo Andreussi	267
Gas Absorption in a Screen-Packed Column — B. H.	281	Overall Effectiveness Factor of a Slurry Reactor for Non-Linear Kinetics — P. A. Ramachandran and	
Chen and S. C. Jain	201	R. V. Chaudhari	412
Gases — Brajendra K. Pathak, Prem C. Singh		Oxidation of Low Concentrations of Hydrogen Sul-	212
and Vishwa N. Singh	38	fide Over Activated Carbon — I. Coskun and E.	
Gasification Reactions of Chars and Modified Chars		L. Tollefson	72
Produced from Jack Pine Bark — Robert A. Ross	000	Ozonation of Cyanide with Emphasis on Gold Mill	
and David V. Fikis	230	Wastewaters — W. J. Rowley and F. D. Otto	646
Reaction in the Static Hold-up V.S. Patwardhan	454	Particle Deposition on a Single Spherical Collector.	
Heat Transfer from a Packed Bed to Outside Tur-		A Three-Dimensional Trajectory Calculation —	10
bulent Flow - Shigeru Mori and Akira Tanimoto	279	Masoud Beizaie and Chi Tien Pitch and Petroleum Coke Additions to Coke Oven	12
Heat Transfer of Evaporating Droplet Flow in Low		Charges — J. T. Price, J. F. Gransden and W. R.	
Pressure System — Anil Rane and Shi-Chune Yao	303	Leeder	339
Heat Transfer of Low Peclet Number Power-Law		Prediction of Binary Vapor-Liquid Equilibrium from	
Fluid Between Parallel Plates with Heat Genera-	401	One-Parameter Equations - Aivars E. Krumins,	
tion — Vi-Duong Dang Improved Correlations for Prediction of Vortex	201	Anil K. Rastogi, Michael E. Rusak and Dimitrios	
Depth in Stirred Draining Vessels — G. Neale		Tassios	663
and W. Hayduk	129	Prediction of the Viscosity of Mixed Electrolyte	
In-Situ Volume Fraction Determination in Multi-		Solutions from Single-Salt Data — Marie-France	697
component Mixing Using Pulsed Nuclear Magnetic		Nowlan, Thi Hoa Doan and James Sangster Preliminary Study of the Corrosiveness of Methyl	637
Resonance — M. S. A. Abouelwafa and E. J. M.	0.49	Fuel/Gasoline Blends on Materials Used in Auto-	
Kendall	643	motive Fuel Systems, A — F. R. Foulkes, R. K.	
Interfacial Tension from Height and Diameter of a Single Sessile Drop or Captive Bubble — J. D.		Kalia and D. W. Kirk	654
Malcolm and C. D. Elliott	151	Process Heat Transfer: Some Practical Problems -	
Intraparticle Effects in Char Combustion Steady		A. Paul Watkinson	553
State Analysis - B. Srinivas and Neal R. Amund-		Production of Synthetic Organic Liquids from Wood	
807	476	Using a Modified Nickel Catalyst, The — D. G.	
Isothermal Column Sorption of Ethylene-Carbon		B. Boocock, D. MacKay, H. Franco and P. Lee	466
Dioxide Mixtures with Azeotropic Behaviour —	195	Real Molecular Weight of Polyethylene Oxide of	
D. Basmadjian and S. T. Hsieh Kinetic Investigation of Complex Pseudo Mass Ac-	185	High Molecular Weight in Water, On the — Claude Wolff	634
tion Systems by Use of the Pulse Method —		Relevance of "HLB" to De-emulsification of a Mix-	004
Erhard G. Christoffel, Indarto T. Surjo and Karl		ture of Heavy Oil, Water, and Clay, The — David	
H. Robschlager	513	G. Cooper, J. E. Zajic, Edward J. Cannell and	
Kinetic Investigation of the Isomerization of Cs-		Joan M. Wood	576
Aromatics — Karl H. Robschlager, and Erhard		Reliability and Limitations of Pulse Chromatogra-	
G Christoffel	517	phy in Evaluating Properties of Flow Systems.	
Kinetics of Oxidation of Cuprous Chloride by Oxygen in Aqueous Hydrochloric Acid Solutions —		II. End Effects — S. K. Gangwal, R. R. Hudgins	
H. Hikita, H. Ishikawa and M. Matsuda	594	and P. L. Silveston	33
Laminar Natural Convection Over a Slender Vertical	002	Rendement de deux réservoirs agités en série avec	
Frustum of a Cone with Variable Surface Tem-		alimentation séparée basé sur la cinétique de Mo-	41
perature - J. P. Chiou and T. Y. Na	438	nod, Le — S. N. Lo, L. Marchildon et J. L. Valade Residence Time Distribution in Static Mixer —	41
Liquid Flow Over a Rotating Dip Coater — K. D. P.		K. D. P. Nigam and K. Vasudeva	543
Nigam and M. N. Esmail	564	Rigorous Design of High Pressure Natural Gas	0.20
Mass Transfer Characteristics of a 'CYCLO-REAC-	200	Pipelines Using BWR Equation of State — R. G.	
TOR' — J. S. Gopal and M. M. Sharma	538	Moore, P. R. Bishnoi and J. K. Donnelly	103
tated Gas-Aqueous Electrolyte Dispersions —		Role of \beta-glucosidase in the Bioconversion of Cellu-	
Ibrahim T. M. Hassan and Campbell W. Robinson	198	lose to Ethanol — M. S. Pemberton, R. D. Brown,	
Mass Transfer Rates Between Oil Slicks and Water		Jr., and G. H. Emert	723
- Yoram Cohen, Donald MacKay and Wan Ying		Second-Law Efficiency Analysis of a Coal Gasifica-	
Shiu	569	tion Process — Luis Rodriguez, and Richard A.	070
Measurements of Interfacial Areas in Cocurrent Gas-		Gaggioli	376
Liquid Downward Flow — J. S. Vavruska and	4.44	Sedimentation of Droplet Dispersions in Counter- Current Spray Columns — A. Kumar, D. K. Vohra	
J. J. Perona	141	and S. Hartland	154
by the Method of Orthogonal Collocation — Kin		Self-Herding of Octanol-Hexadecanol Mixtures on	101
Tuck Wong and Rein Luus	382	Water — R. F. Platford	393
Nature of the Active Sites in the Catalytic Cracking		Short Residence Hydropyrolysis for Coals - Wayne	
of Gas-Oil, The - A. Borodzinski, A. Corma and		A. Fling, Jr., and Uriel M. Oko	708
B. W. Wojciechowski	219	Simplified Derivation of the General Population	
Nature of the Active Sites in the Reactions of		Balance Equation for a Seeded Continuous Flow	
Cumene on Hy and LaY Catalysts, The — A.	000	Crystallizer — J. P. Barone, W. Furth and S.	105
Corma and B. W. Wojciechowski	620	Loynaz	137
New Theoretical Formula for Turbulent Heat and Mass Transfer with Gases or Liquids in Tube		Simulating the Effects of Mixing on the Performance of Unpremixed Flow Chemical Reactors—	
Flow, A — O. C. Sandall O. T. Hanna and P. R.		Ben W. Ritchie	626

Solidification of a Low Peclet Number Flu	id Flow	Masliyah and Marcel Polikar	299
in a Round Pipe with the Boundary Cond	lition of	Thermal Conductivity of Acetic Acid in the Gas	
the Third Kind - S. L. Lee and G. J. Hw	ang 177	State — William H. Seaton	416
Solvent Extraction of Furfural from Aqueou	us Solu-	Transferts thermiques entre un serpentin et des	
tions - I. Kikic, P. Alessi and A. Cividini	119	fluides newtoniens ou non newtoniens agité par	
Some Aspects of Research on Coal Liquefa	ction in	une turbine à pales inclinées dans une cuve -	
Alberta - B. Ignasiak and R. A. S. Brow	n 687	Hervé Desplanches, J. Richard Llinas et Jean-	
Sphere Motion Through Non-Newtonian F	luids at	Louis Chevalier	160
High Reynolds Number - R. P. Chhabra,	P. H. T.	Transient Behavior of the Oxidation of Propylene	
Uhlherr	124	over a Modified Silver Oxide — Masayoshi Ko-	
Spray Atomizer Droplet Spectrum Measure	ment —	bayashi	588
J.J.C. Picot, T. D. Tomey, J. B. Smedley as		Two Phase Flow in a Climbing-Film Evaporator —	
Kristmanson	314	C. T. Tang	425
Statistical Identification of a Reaction I	Network	Two-Step Coal Liquefaction is a Hydrogen Efficient	
Using an Integral Plug Flow Reactor - I	David D.	Route to Distillate Fuels — Thomas C. Carson,	
McLean, David W. Bacon and John Down	ie 608	John Caspers, Kenneth E. Hastings and John	
Statistical Study on the Batch Conversion	of Este-	D. Potts	703
van Lignite Into Oils Using Carbon M	Ionoxide	Unsteady Stagnation Point Heat Transfer in Non-	
and Hydrogen Mixtures - R. Fonseca, I	E. Chor-	Newtonian Fluids — Rama Subba Reddy Gorla	431
net, C. Roy, M. Grandbois and James F. K	Celly 458	Use of Krasovskii's Stability Technique for Control	
Status of German Technology on Coal Hyd	drogena-	Strategy Evaluation and System Design, The -	
tion Development by Ruhrkohle AG and V	eba Oel	P. L. Lee and R. B. Newell	389
AG - Josef Langhoff, Eckard Wolowsl	ki, Gerd	Use of the Quasi Steady State Assumption for a	
Escher and Hans Hosang	693	Stirred Tank Reactor with Decaying Catalysts	
Study of Chromia Alumina Catalysts —	Indresh	- Edward K. Reiff, Jr.,	409
Mathur, Narendra N. Bahkshi and Joseph	F. Ma-	Vapor-Liquid Equilibrium in Mixtures of 1,3 Dioxo-	
thews	601	lane-Water - Romolo Francesconi, Carlo Castel-	
Surface Area Prediction for Two Phase I	Orops in	lari, Antonio Arcelli and Fabio Comelli	113
an Immiscible Liquid — K. L. Pinder	318	Vortex Formation in Stirred Draining Vessels. II.	
Surface Mass Transfer Processes Using	Peat as	Gravity Drainage - Graham Neale, Walter	
an Adsorbent for Dyestuffs - Gordon Mc		Hayduk and Dennis Ma	396
Stephen J. Allen		Wave Profiles on Inclined Falling Film - M. N.	
Terminal Velocity of Porous Spheres — J	acob H.	Esmail	145

THE EDITORS ARE GRATEFUL TO THE FOLLOWING REVIEWERS FOR THEIR ASSISTANCE

THROUGH THE PERIOD OCTOBER 1, 1979 TO SEPTEMBER 30, 1980

ABBOTT, D. M., Rensselaer Polytechnic Institute, NY ABDEL-MESSEH, W., Pratt & Whit-

ney Aircraft, Quebec ABDELMISSIH, A. H., U. of Toronto

AL-TAWEEL, A., Nova Scotia Technical College

Y., National Re-AMENOMIYA, search Council, Ottawa

ANDERSON, J. L., Carnegie-Mellon University, Pittsburgh ANDERSON, R. B., McMaster Uni-

H. R., U.S. Bureau of APPELL, Mines, Pittsburgh

APRIL, G. C., U. of Alabama ARIS, R., U. of Minnesota

AVEDESIAN, M., Noranda Research Centre, Quebec AZIZ, K., U. of Calgary

BAIRD, M. H. I., McMaster University

BAKHSHI, N. N., U. of Saskat-

BASE, T. E., U. of Western Ontario BASMADJIAN, D., U. of Toronto BECKER, H. A., Queen's University BEECKMANS, J. M., U. of Western Ontario

BEHIE. L. A., U. of Calgary BENEDEK, A. A., McMaster Uni-

versity BENNION, D. N., U. of California BENNION, D. W., U. of Calgary BERGOUGNOU, M., U. of Western Ontario

BERTOLACINI, R. J., Amoco Oil, Illinois

BISCHOFF. K. B., U. of Delaware BISHNOI, P. R., U. of Calgary

BLANCHARD, L. P., Laval University. Quebec

BOLK, B. C., Amax Engineering, Connecticut

BONE, D. H., Queen's University BOOCOOK, D. G. B., U. of Toronto BOORMAN, R., N.B. Research & Productivity Council, Fredericton BRANION, R. M. R., U. of British

Columbia BRIMACOMBE, K., U. of British

Columbia BRODKEY, R. S., Ohio State Uni-

versity BROSILOW, C.B., Case Western Reserve University, Cleveland

BROWN, R. A. S., Research Council of Alberta

BROWN, R. P., U. of Sherbrooke, Quebec

BRZUSTOWSKI, T. A., U. of Waterloo

BURGESS, W.H., U. of Toronto BURKE, F. P., Conoco Coal, PA BUSH, M. J., U. of Calgary

BUTT, J. B., Northwestern University, Ill.

BUTT, M. A., U. of the Punjab. Pakistan

BYERLEY, J. J., U. of Waterloo CALO, J. M., Princeton University, NJ

CAPES, C. E., National Research Council, Ottawa

CARBERRY, J. J., U. of Notre Dame, Indiana CARPENTER, D. K., Louisiana State

University CARREAU, P., Ecole Polytechnique, Montreal

CARTER, J. W., U. of Birmingham, England

CASPERS, J., C-E Lummus Co., NJ CATANIA, P., U. of Regina

CAVERS, S. D., U. of British Columbia CHAFFEY, C. E., U. of Toronto

CHANG, K. S., U. of Waterloo CHARACKLIS, B., Rice University, Texas

CHARLES, M. E., U. of Toronto CHARPENTIER, J. C., Ecole Nationale Supérieure des Industries Chimiques, France

CHEN, B. H., Nova Scotia Technical College

CHEN, J. L. S., U. of Pittsburgh CHIAN, E. S. K., Georgia Institute of Technology

CHORNET, E., Université de Sherbrooke, Quebec

CLEMENTS, L. D., Texas Tech. University CLIFT, R., U. of Cambridge, England

COCIVERA, M., U. of Guelph CONNER, W. C., U. of Massachusetts COONEY, C. L., Massachusetts Institute of Technology

CORMACK, D. E., U. of Toronto GROSBIE, A. L., U. of Missouri CROSBY, E. J., U. of Wisconsin CULLINAN, H. T., Institute of Pa-

ner Chemistry, Wisconsin CVETANOVIC, R., National Research Council, Ottawa

DARBY, R., Texas A & M University DAUGULIS, A., Queen's University DAVIES, J. A., McMaster University DAVIES, J. T., U. of Birmingham, England

DAVIS, E. J., Institute of Paper Chemistry, Wisconsin DEAL, C. H., Shell Development

Corp., Texas DEALY, J. M., McGill University DECKWER, W. D., Universitat Hannover, Germany

DE COURSEY, W. J., U. of Saskatchewan

DEL BEL, E., Pittsburgh Energy Technical Center

DE LEEUW. J. H., Institute for Aerospace Studies, Ontario DELICHATSIOS. M., Factory Mu-

tual Research Corp., Massachusetts DENN. M. M., U. of Delaware DENNIS, S. C. R., U. of Western

Ontario DOMBROWSKI, N., U. of Leeds. England

DONAHUE. F. M., U. of Michigan DONNELLY, J. K., U. of Calgary DOUGLAS, J. M., U. of MassachuDOWNIE, J., Queen's University DUDUKOVIC, M., Washington University, Missouri ECKERT, R. E., Purdue University,

Indiana

EDGAR, T. F., U. of Texas EDWARDS, M. F., U. of Bradford, England

ELLIOTT, D. C., Battelle Pacific Northwest Lab., Washington

ENG, J., Imperial Oil Enterprises, Ltd., Ontario

EPSTEIN, N., U. of British Columbia ESMAIL, M. N., U. of Saskatchewan FADDICK, R., Colorado School of Mines

FAROUQ ALI, S. M., U. of Alberta FEINGOLD, A., U. of Ottawa FINLAYSON, B. A., U. of Washing-

ton

FLUMERFELT, R. W., U. of Houston FLYNN, P. C., Syncrude Canada Ltd., Alberta

FONDA, A. E., National Research Council, Ottawa

FONSECA, R., Sandwell Beak, Ontario

FORD, J. D., U. of Waterloo FOULKES, F. R., U. of Toronto FREEL, J., Pittsburgh & Midway

Coal Mining Co., Colorado FUNG, D. P. C., Energy, Mines & Resources Canada, Ottawa

GARRED, L., Lakehead University, Ontario

GAVALAS, G. R., California Institute of Technology GEBHARDT, B., State University of

New York at Buffalo

GELDART, D., U. of Bradford, England

GILPIN, R. R., U. of Alberta GLASS, I. I., U. of Toronto

GOLDING, J. A., U. of Ottawa GOLDSACK, D. E., Laurentian University, Ontario

GRACE, J. R., U. of British Columbia

GRAHAM, M. J., National Research Council, Ottawa

GRAVELLE, D., Université de Sherbrooke, Quebec GRAY, M. D., Coal Processing Con-

sultants, Ltd., England

GREGORY, G. A., U. of Calgary GROSSMAN, E. D., Drexel University, PA

GUBBINS, K. E., Cornell University, NY

GUIN, J. A., Auburn University, Alabama GULYAS, J. W., Sherritt Gordon

Mines Ltd., Alberta GUNN, R. D., U. of Wyoming

HAFEZ, M., Imperial Oil Research, Ontario

HALL, K. R., Texas A & M Universitv HAN, C. D., Polytechnic Institute of

New York HANRATTY, T. J., U. of Illinois HARRISON, W. C., Whiteshell Nuclear Research Establishment, Manitoba

HASSON, D., Israel Institute of Technology

HASTINGS, K. E., Cities Service Co., Oklahoma

HAYDUK, W., U. of Ottawa HAYNES, W. P., U.S. Energy, Re-search & Development Administration, PA

HEIDEMANN, R. A., U. of Calgary HEIDRICK, T., Alberta Research Council, Edmonton

HIGGINS, B. G., Institute of Paper Chemistry, Wisconsin

HOLSTE, J. C., Texas A & M University

HOMSY, G. M., Stanford University, Calif.

HSU, C. C., Queen's University HUBBARD, D. W., Michigan Tech. University

HUMPHREY, J. A. C., U. of California

IGNASIAK, B., Alberta Research Council, Edmonton
JACKSON, R., U. of Houston

JAIN, R. K., Carnegie-Mellon University, Pittsburgh

JOHNS, L. C., U. of Florida JOHNSON, J. W., U. of Missouri JOLICOEUR, C., U. of Sherbrooke, Quebec

JONES, J. P., U. of Sherbrooke, Quebec

JUDD, R. L., McMaster University KEAIRNS, D., Westinghouse, Pittsburgh

KELLY, J. F., Energy Research Labs., Ottawa

KENNEDY, C. R., Mobil Research & Development Corp., NJ KENNEY, C. N., U. of Cambridge,

England KENNEY, W. F., Exxon Chemical Corp., NJ

KERMODE, R. I., U. of Kentucky KING, C. J., U. of California KLEMPNER, D., U. of Detroit

KOKTA, B. V., Université du Québec à Trois-Rivières KOSARIC, N., U. of Western Ontario

KRANICH, W. L., Worcester Poly. Institute, Mass. KRIEGER, I. M., Case Western

Reserve University, Cleveland KRISHNASWAMY, P. R., Indian In-

stitute of Technology, India KRUYER, J., Kruyer Research & Development Ltd., Edmonton KUBANEK, G. R., Noranda Research

Ltd., Quebec KUNII, D., U. of Tokyo

LADDHA, G. S., U. of Madras Guindy, India

LANDAU, J., U. of New Brunswick LATTO, B., McMaster University LAUGHLIN, R., Ontario Research

Foundation, Mississauga LAURENCE, R. L., U. of Massachusetts

LEAL, L. G., California Institute of Technology

LEDUY, A., U. of Laval, Québec LEE, H. H., U. of Florida LEUNG, L. S., U. of Queensland,

Australia LICHT, W., U. of Cincinnati LIELMEZS, J., U. of British Columbia

LIS, J., Central Electricity Research Lab., England LITCHFIELD, R., Surrey University,

LU. B. C. Y., U. of Ottawa LUKS, K. D., U. of Notre Dame,

England

Indiana LUSIS, M. A., Atmos. Environment Service, Ontario

LUYBEN, W. L., Lehigh University,

MA, Y. H., Worcester Polytech. Institute, Mass.

MACGREGOR, J. F. McMaster University

MACKAY, D., U. of Toronto MANN, R., U. of Manchester, Eng-

MANN, R. F., Royal Military College

MANN, R. S., U. of Ottawa MANNING, F. S., U. of Tulsa MANNING, M. P., Massachusetts

Institute of Technology MARSTERS, G. F., Queen's Univer-

MARTIN, C. S., Georgia Institute of Technology MARTIN, H., Atmospheric Environ-

ment Service, Ontario MARTIN, W. W., U. of Toronto MASLIYAH, J., U. of Alberta MASON, S. G., Pulp & Paper Research Institute, Quebec

MATSEN, J. M., Exxon Research & Engineering Co., NJ MATTAR, L., U. of Calgary MATULA, J. P., Exxon Research &

Engineering Co., NJ MCAVOY, T. J., U. of Massachusetts MCCUTCHAN, J. W., U. of Califor-

nia

MCMILLAN, A. F., NSTC Halifax, Nova Scotia

MEISEN, A., U. of British Columbia MELLICHAMP, D. A., U. of California

MESLER, R. B., U. of Kansas METZNER, A. B., U. of Delaware MEUBUS, B., U. of Quebec MIDDLEMAN, S., U. of Massachu-

MISEK, T., Research Institute of Chemical Equipment, Czechoslova-

MISLAN, J. P., Chalk River Nuclear Laboratories, Ontario MISSEN, R. W., U. of Toronto MODELL, M., Massachusetts Institute of Technology

MONTGOMERY, D. S., U. of Alberta MOO-YOUNG, M., U. of Waterloo MORELAND, C., U. of New Brunswick

MORGAN, V. T., National Measurement Lab., Australia MORRIS, J. C., Harvard University,

Mass. MOTARD, R. L., Washington University, Missouri

MUELLER, G. S., U. of Waterloo MUIR, W. E., U. of Manitoba MUJUMDAR, A. S., McGill Universitv

NADER, W. K., U. of Alberta NAYFEH, A. H., Virginia Polytechnic Institute

NEALE, G., U. of Ottawa

NIEMAN, R. E., Whiteshell Nuclear Research Establishment, Manitoba OBERG, C. L., Rockwell International. Calif.

O'CONNELL, J. P., U. of Florida O'DRISCOLL, K. F., U. of Waterloo OGILVIE, J., Guelph University O'HARA, J. B., Ralph M. Parsons Co., California

OSTERGAARD, K., Technical University of Denmark OTTEN, L., U. of Guelph

OTTO, F. D., U. of Alberta

PATON, D., Food Research Institute, Ottawa

PATTERSON, I., Ecole Polytechnique, Montréal PATTON, A. A., Imperial Oil Ltd.,

Toronto PEI, D. C. T., U. of Waterloo PHILLIPS, M. J., U. of Toronto

PICOT, J. J. C., U. of New Brunswick PONTER, A. B., Michigan Technological University

POPE, A. E., Gulf Oil Canada, Onta-

PRENGLE, H. W., U. of Houston PRIEVE, D. C., Carnegie-Mellon University, Pittsburgh

PROBSTEIN, R. F., Massachusetts Institute of Technology PRUDEN, B. B., Petro-Canada, Cal-

gary PYLE, D. L., Imperial College, Eng-

RAITHBY, G. D., Canada Center for

Inland Waters, Burlington RAJAN, V. S. V., Whiteshell Nuclear Research Establishment, Manitoba

RASE, H. F., U. of Texas RAY, W. H., U. of Wisconsin REIHMAN, T. C., Montana State University

REMPEL, G. L., U. of Waterloo RENON, H., ENSMP-ENSTA, Equipe de Recherche Associée Au CNRS No. 768, France

RIPPIN, D. W. T., E.T.H. Zentrum, Switzerland

RITCEY, G. M., Dept. of Energy, Mines & Resources, Ottawa ROBINSON, C. W., U. of Waterloo ROBINSON, D. B., U. of Alberta

ROBNETT, J. D., Dupont Co., S.C. ROSEHART, R., Lakehead University. Ontario

ROULEAU, D., Ecole Polytechnique, Montréal

ROUND, G. F., McMaster University ROUSSEAU, R. W., North Carolina State University

RUDIN, A., U. of Waterloo RUETHER, J. A., PERC/ERDA, Pittsburgh

RUSHTON, A., U. of Manchester, England

RUSSELL, T. W. F., U. of Delaware RUST, J. H., Georgia Institute of Technology

RUTHVEN, D. M., U. of New Brunswick

SADANA, A., National Chemical Laboratory, India

SAGERT, N., Whiteshell Nuclear Research Establishment, Manitoba SANGSTER, J., Ecole Polytechnique, Montréal

SAWATZKY, H., Energy, Mines & Resources, Ottawa

SAXENA, S. C., U. of Illinois SCHIFF, H. I., York University, Toronto

SCHMITZ, R. A., U. of Notre Dame, Indiana

SCHULTZ, J. S., U. of Michigan SCOTT, D. S., U. of Waterloo SEAGRAVE, R. C., Iowa State University

SELIM, M. S., Texas Tech. University SELMAN, J. R., Illinois Institute of

Technology

SHAH, Y. T., U. of Pittsburgh SHARMA, M.M., U. of Bombay SHOOK, C. A., U. of Saskatchewan SILVESTON, P. L., U. of Waterloo SKELLAND, A. H. P., Georgia Institute of Technology

SLEICHER, C. A., U. of Washington SMITH, D., Ontario Research Foun-

dation, Sheridan Park SMITH, J. W., U. of Toronto

SMITH, W. D., U. of Rochester, NY SNOEK, C. W., Chalk River Nuclear

Laboratory, Ontario SOHN, H. Y., U. of Utah

SOLIMAN, H. M., U. of Manitoba SOO, S. L., U. of Illinois

SOURIRAJAN, S., National Research Council, Ottawa SPARKS, B. D., National Research

Council, Ottawa SPARROW, E. M., U. of Minnesota

SPINK, D. R., U. of Waterloo STARR, C. C., Wilber B. Driver Co., NJ

STEPANEK, J. B., U. of Salford, England

STEPHANOPOULOS, G., U. of Minnesota

STEPHENS, D. R., Lawrence Livermore Laboratory, Calif. STEWARD, F. R., U. of New Bruns-

wick STEWART, D. W., Land Resource Research Institute, Ottawa

STREAT, M., Imperial College, England

SVRCEK, W. Y., U. of Calgary SYLVESTER, N. D., U. of Tulsa TALBOT, F. D. F., U. of Ottawa TALLMADGE, J. A., Drexel Univer-

sity, Philadelphia

TAUNTON, J. R., Bayton Resource & Development, Texas

TAVLARIDES, L. L., Illinois Institute of Technology

TAYLOR, P. A., McMaster University TERNAN, M., Energy, Mines & Resources, Ottawa

THODOS, G., Northwestern University, Illinois

THOMAS, W. J., U. of Surrey, England

THOMSON, W. J., U. of Idaho THURTELL, G., U. of Guelph TIEN, C., Syracuse University, NY TOLLEFSON, E. L., U. of Calgary TRASS, O., U. of Toronto TURNER, G. A., U. of Waterloo

TURNER, G. A., U. of Waterloo VALADE, J. L., Université du Québec, Trois-Rivières

VARMA, A., U. of Notre Dame, Indiana VAUGHAN, D. E. W., Exxon Re-

search & Engineering Co., NJ VELTMON, H., Sherritt Gordon Mines Ltd., Alberta

VENART, J. E. S., U. of New Brunswick VERA, J. H., McGill University

VERMA, A., Saskatchewan Oil & Gas Corp., Regina VIJAYAN, S., McMaster University VILLERMAUX, J., U. de Nancy, France

WAGGONER, R. D., U. of Missouri WAKAO, N., Yokohama National University, Japan WALDEN, C. C., British Columbia

Research Council, Vancouver WALL, T. F., U. of Newcastle, Australia

WANKE, D., U. of Alberta WASAN, D. T., Illinois Institute of Technology WATKINSON, A. P., U. of British

Columbia

WAYMAN, M., U. of Toronto
WEBER, J. H., U. of Nebraska
WEBER, M. E., McGill University
WEBER, T. W., State University of
New York at Buffalo

WEILER, D. W., Union Carbide Corp., NY

WEINTRAUB, M., U.S. Dept of Energy, Pittsburgh

WEISS, A. H., Worcester Polytechnic Institute, Mass. WELLER, S. W., State University

of New York at Buffalo WHALEY, H., Canadian Combustion Research Lab., Ottawa

WILKINSON, W. L., of Bradford, England WILSON, N., U. of Newfoundland

WINNICK, J., U. of Missouri WOJCIECHOWSKI, B. W., Queen's University

WOO, S. W., Imperial Oil Enterprises, Ontario WRAGG, A., U. of Exeter, England WRIGHT, J. D., McMaster University WRIGHT. T. E., ALCAN, Ontario WU, J. H. T., McGill University ZAMIN, M., ALCAN, Ontario

ZUDKEVITCH, D., Allied Chemical Corp., NJ

